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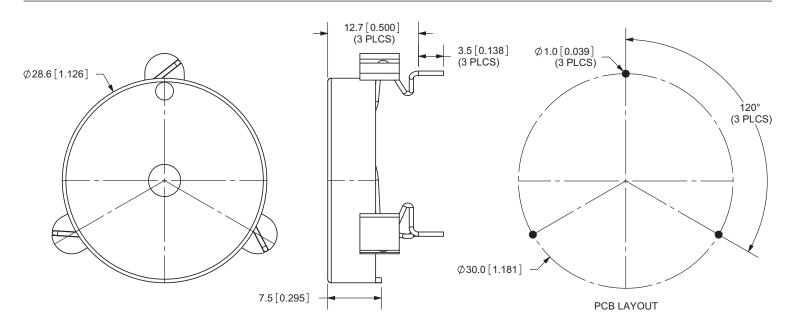
PART NUMBER: CPE-2883

DESCRIPTION: PIEZO AUDIO TRANSDUCER

SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
operating frequency		2.5	3	3.5	K Hz
operating voltage		3		28	V dc
operating current	at 12 V dc			8	mA
sound pressure level	at 30 cm / 12 V dc	83			dB
rated voltage		12			V dc
tone	continuous				
operating temperature		-30		85	°C
storage temperature		-40		95	°C
dimenstions	ø28.6 x H7.5 mm				
weight				3.8	g
material	ABS UL-94 1/16" HB high heat (black)				
terminal	pin type (au plating)				
RoHS	yes				

APPEARANCE DRAWING



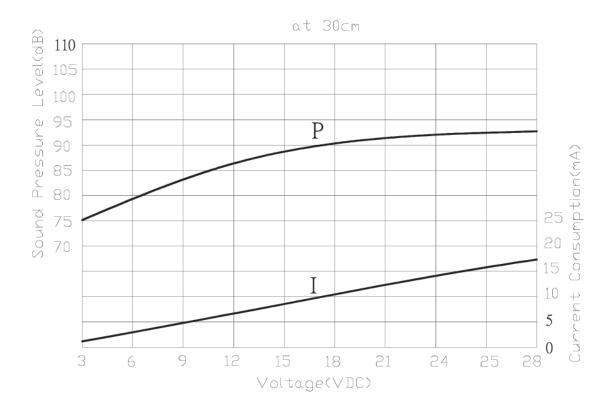
TOLERANCE: ±0.3mm UNLESS OTHERWISE SPECIFIED



PART NUMBER: CPE-2883

DESCRIPTION: PIEZO AUDIO TRANSDUCER

VOLTAGE: SPL / CURRENT CONSUMPTION CHARACTERISTICS



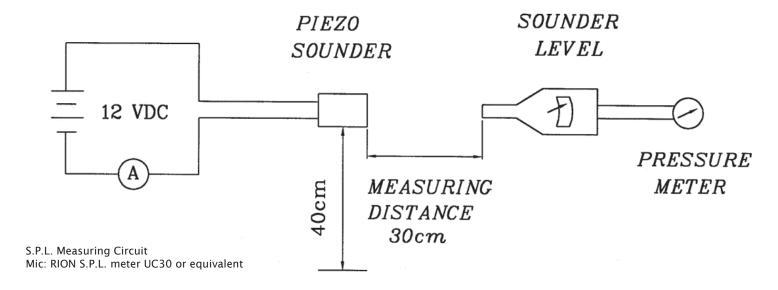


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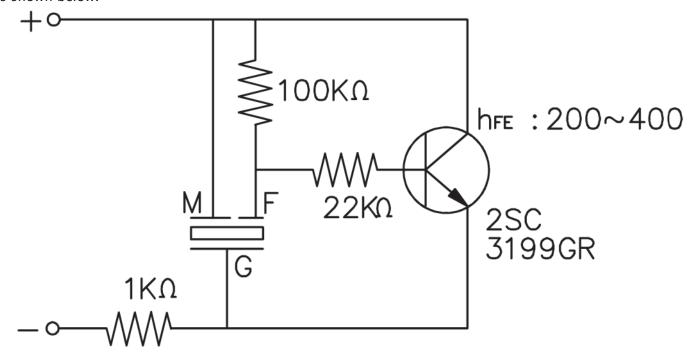
PART NUMBER: CPE-2883 DESCRIPTION: PIEZO AUDIO TRANSDUCER

MEASUREMENT METHOD

1) S.P.L. measuring circuit



2) The current consumption and the sound pressure level are measured by using the recommended driving circuit as shown below.





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PART NUMBER: CPE-2883

DESCRIPTION: PIEZO AUDIO TRANSDUCER

MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard 90% min. of the lead terminals will be wet with solder. (except the edge of the terminal)	
solderability ¹	Lead terminals are immersed in rosin for 5 seconds and then immersed in a solder bath of $+270 \pm 5^{\circ}\text{C}$ for 3 ± 1 seconds.		
soldering heat resistance	Lead terminals are immersed up to 1.5 mm from the buzzer's body in a solder bath of 300 $\pm 5^{\circ}$ C for 3 ± 0.5 seconds or 260 $\pm 5^{\circ}$ C for 10 ± 1 second.	No interference in operation.	
terminal mechanical strength	The force of 9.8 N is applied for 10 sec. to each terminal in axial direction.	No damage or cutting off.	
vibration test	The buzzer should be measured after a vibration amplitude of 1.5 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	The value of oscillation frequency / current consumption should be ±10% of the initial measurements. The SPL should be within ±10dB compared with the initial measurement.	
drop test	The buzzer without packaging is subjected to 3 drops on each axis from the height of 75 cm onto a 40 mm thick wooden board.		

Notes: 1. Not recommended for wave soldering

ENVIRONMENT TEST

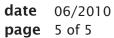
item	test condition	evaluation standard	
high temperature test	After being placed in a chamber at +95°C for 240 hours.		
low temperature test	After being placed in a chamber at -40°C for 240 hours.		
humidity test	After being placed in a chamber at $+40^{\circ}\text{C}$ and 90 $\pm5\%$ RH for 240 hours.		
temperature cycle test	The part will be subjected to 5 cycles. One cycle will consist of: +95°C +25°C -40°C 0.5hr 0.5hr 0.25 0.5hr 0.5hr 0.5hr 0.25	The buzzer will be measured after being placed at +25°C for 4 hours. The value of the oscillation frequence / current consumption should be ±10% compared to the initial measurements. The SPL should be within ±10dB compared to the initial measurements.	

RELIABILITY TEST

item	test condition	evaluation standard
operating (life test)	 Continuous life test: The part will be subjected to 48 hours of continuous operation at 70°C with rated voltage applied. 	The buzzer will be measured after being placed at +25°C for 4 hours. The value of the oscillation frequency / current consumption should be
	2. Intermittent life test: A duty cycle of 1 minute on, 1 minute off, a minimum of 5,000 times at room temp (+25 \pm 2°C) with rated voltage applied.	±10% compared to the initial measurements. The SPL should be within ±10dB compared to the initial measurements.

TEST CONDITIONS

standard test conditions	a) Temperature: +5 ~ +35°C	b) Humidity: 45 ~ 85%	c) Pressure: 860 ~ 1060 mbar
judgement test conditions	a) Temperature: +25 ±2°C	b) Humidity: 60 ~ 70%	c) Pressure: 860 ~ 1060 mbar





PART NUMBER: CPE-2883

DESCRIPTION: PIEZO AUDIO TRANSDUCER

PACKAGING

